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09/867,053	05/29/2001	William A. Rozzi	10278US01	5745

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EXAMINER

LUU, MATTHEW

ART UNIT PAPER NUMBER

2676

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/867,053	<b>Applicant(s)</b> ROZZI, WILLIAM A.	
	<b>Examiner</b> LUU MATTHEW	<b>Art Unit</b> 2676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on the amendment filed November 9, 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-8 and 10-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-8, and 10-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claim 21 is objected to because of the following informalities:

Claim 21, lines 5-6, "adjusting color data received from a source device for use by the display device based on a source device profile associated with a source imaging device," since Figure 3 of the present invention shows only a source device (35) associated with a source device profiled (36), the examiner construes the claimed "a source imaging device" to be "a source device". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4 and 17 recites the limitation "wherein the computer circuitry" (claim 4) and "wherein the circuitry comprises calibration circuitry "(claim 17), in line 2. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-8, 10-27, 29, 31-34, 36, and 38-39 are rejected under 35 U.S.C.

103(a) as being unpatentable over Deguchi et al (6,480,202) in view of Hansen (6,1147,664).

Regarding the most comprehensive independent claim 31, Deguchi discloses (Figs 6 and 8) a display device (3) including: a display (monitor 103) that produces a visible representation of an image; and an illuminant condition sensor (ambient light input section 101) that senses illuminant conditions surrounding the display device, the illuminant condition sensor (101) being mounted on the display device so as to form part of the display device. See column 7, lines 52-58.

Deguchi further discloses (Figs. 8 and 15) a color matching module (image processing section 100) coupled to the sensor (101) that automatically adjusts color data received from on a source device (Fig. 15, monitor 103-1) for use by the display device (monitor 103-2) based on a source device profile (Fig. 15, profile C in memory 104a-1), a destination device profile (a display profile E, 104a-2) associated with the display device (monitor 103-2), and the sensed illuminant conditions. See column 4, lines 55-58; and column 15, line 13 to column 16, line 5.

The only difference between the disclosure of Deguchi and the claimed invention

is that the comprehensive claim 31 requires the illuminant sensor to be integrated with the display device.

However, Hansen discloses (Figs. 7-10) a display device for a computer system comprises a screen (200) and at least one sensors (Fig. 7, 580a and 580b) being integrated on the upper display housing portion (590a) and lower display housing portion (590b), respectively. See column 14, lines 15-17.

It would have been obvious to a person of ordinary skill in the art to use the integrated ambient light sensors being located at different locations for the light sensor of Deguchi to provide a more compact display device, wherein the light sensors can be integrated and protected when the computer display device being dropped or damaged.

Regarding independent claim 1, which is broader than the comprehensive claim 31, therefore, note the rejection as set forth above with respect to claim 31. Deguchi further discloses (Fig. 8) a computer circuitry (image processing section 100) that calibrates the display according to the illuminant conditions sensed by the sensor. See column 6, line 49 to column 7, line 6.

Regarding independent claim 15, which is broader than the comprehensive claim 31, therefore, note the rejection as set forth above with respect to claim 31. Deguchi further discloses (Fig.8) automatically adjusting display

characteristics of the display device according to the sensed illuminant conditions. See column 7, lines 52-58.

Regarding independent claim 21, which is broader than the comprehensive claim 31, therefore, note the rejection as set forth above with respect to claim 31. Deguchi further discloses (Fig. 8) adjusting color data according to the sensed illuminant conditions. See column 7, lines 21-30.

Regarding claim 3, Deguchi further discloses (Fig. 6) wherein the illuminant condition sensor (101) senses display emission characteristics of the display (colors of self-emission of monitor) in addition to illuminant conditions surrounding the display device (ambient light).

Regarding claim 4, Deguchi discloses (Figs. 6 and 8) the computer circuitry (image processing section 100) coupled to the sensor, the computer circuitry automatically calibrating the display according to illuminant conditions sensed by the sensor and display emission characteristics sensed by the sensor. See column 6, line 49 to column 7, line 6.

Regarding claim 5, note the rejection as set forth above with respect to claim 1.

The only difference between the claimed invention and the

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disclosure of Deguchi is that the claim 5 requires a second sensor that senses display emission characteristics.

However, Hansen discloses (Figs. 7-10) a display device for a computer system comprises a screen (200) for displaying a color picture image for a user in front of the screen, at least one sensors (Fig. 7, 580a and 580b) at different locations for detecting light around the screen. See column 14, lines 28-31.

Since Deguchi teaches that more than one photosensors mounted on the monitors (103) and Hansen teaches at least one sensors (Fig. 7, 580a and 580b) at different locations, it is obvious to a person of ordinary skill in the art can recognize that any photosensors of Deguchi can be considered as the claimed "second sensor" for sensing display emission characteristics at different locations on the display screen.

Regarding claim 6, Deguchi further discloses (Fig. 6) wherein the illuminant condition sensor (101) senses display emission characteristics of the display (colors of self-emission of monitor) in addition to illuminant conditions surrounding the display device (ambient light).

The only difference between the claimed invention and the disclosure of Deguchi is that the claim requires the sensor can be positioned at a first location to detect illuminant conditions and positioned at a second location to detect emission characteristics.

However, Hansen discloses (Figs. 7-10) a display device for a computer

system comprises a screen (200) for displaying a color picture image for a user in front of the screen, at least one sensors (Fig. 7, 580a and 580b) at different locations for detecting light around the screen. See column 14, lines 28-31.

Since Deguchi teaches that more than one photosensors mounted on the monitors (103) and Hansen teaches at least one sensors (Fig. 7, 580a and 580b) at different locations, it is obvious to a person of ordinary skill in the art can recognize that any photosensors of Deguchi can be positioned at different locations for sensing both display emission characteristics and illuminant conditions surrounding the display device (ambient light).

Regarding claims 7-8, 10-14, 18, 22, and 32, the only difference between the claimed invention and the disclosure of Deguchi is that the claims require the sensor a charge coupled device, or a linear charged coupled device, or other different types of light sensing devices.

However, since Hansen mentions that a number of different ambient light sensors can be used for detecting ambient light (column 15, lines 51-52), it is obvious to a person of ordinary skill in the art to use the different light sensors of Hansen in place of the ambient light and color sensors of Deguchi to adjust both of the color and brightness of the color images displayed on the display screen using the best choice of sensing devices that fit for detecting light and color in various illuminant conditions in the surrounding areas.

Regarding claim 16, Deguchi further discloses (Fig. 8) the



illuminant condition sensor provides input to a display driver (monitor control section 102), and wherein the display characteristics of the display device are automatically adjusted by the display driver. See column 7, lines 21-30.

Regarding claim 17, the display device (Fig. 8) further comprising computer circuitry (image processing section 100) that calibrates the display according to the illuminant conditions sensed by the sensor. See column 6, line 49 to column 7, line 6.

Regarding claims 19-20, Deguchi further discloses (Fig. 6) wherein the illuminant condition sensor (101) senses display emission characteristics of the display (colors of self-emission of monitor) in addition to illuminant conditions surrounding the display device (ambient light).

Regarding claim 23, Deguchi discloses (Fig. 6) sensing display emission characteristics (color of self-emission of monitor) and adjusting color data according the sensed display emission characteristics. See column 3, lines 57-66; and column 8, lines 40-44.

Regarding claim 24, Deguchi discloses (Fig. 6) sensing display reflection characteristics (ambient light reflected by CRT surface) and adjusting color data according the sensed

display reflection characteristics. See column 6, lines 57-64.

Regarding claim 25, Deguchi further discloses (Fig. 6) wherein the illuminant condition sensor (101) senses display emission characteristics of the display (colors of self-emission of monitor) in addition to illuminant conditions surrounding the display device (ambient light).

Regarding claim 26, Deguchi discloses (Fig. 8) the adjusting color data occurs in a color matching module (image processing section 100). See column 4, lines 55-58.

Regarding claims 27 and 29, Deguchi discloses (Figs. 6 and 8) the computer circuitry (image processing section 100) coupled to the sensor, the computer circuitry automatically calibrating the display according to illuminant conditions sensed by the sensor and display emission characteristics sensed by the sensor. See column 6, line 49 to column 7, line 6.

Regarding claim 33, Deguchi discloses (Fig. 6) sensing display emission characteristics (color of self-emission of monitor) and adjusting color data according the sensed display emission characteristics. See column 3, lines 57-66; and column 8, lines 40-44.

Regarding claims 34 and 36, Deguchi discloses (Figs. 6 and 8) the computer circuitry (image processing section 100) coupled

to the sensor, the computer circuitry automatically calibrating the display according to illuminant conditions sensed by the sensor and display emission characteristics sensed by the sensor. See column 6, line 49 to column 7, line 6.

Regarding claim 38, Deguchi discloses (Fig. 8) a color management control (monitor control section 102, image processing section 100, memory section 104), the color matching module (image processing section 100) residing in the color management control (102, 100, 104).

Regarding claim 39, Deguchi discloses (Fig. 1) a printing device (4) coupled to the color management control (Fig. 1). See column 1, lines 50-60.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 28, 30, 35, 37, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deguchi et al (6,480,202) in view of Hansen (6,147,664) as applied to claims 1, 21, and 31 above, and further in view of Liang (5,579,031).

Regarding to claims 28, 30, 35, and 37 and the claimed look-up table, Deguchi further discloses (Fig. 17) the look-up table (LUTs) being used in the color and brightness adjustment display system of Deguchi. See column 28, lines 3-7 and lines 42-48.

Furthermore, Liang also discloses (Figs. 1 and 2) the using of look-up table for adjust color data. It is obvious to the person of ordinary skill in the art to use the look-up table for adjusting the color data, as taught by Liang, into the display device of Deguchi since this is conventional in the art.

Regarding claim 40, Liang also discloses (figs. 1 and 2) a plurality of a display devices in a color adjustment system. It is obvious to the person of ordinary skill in the art to use the multiple displays color matching method of Liang into the display system of Deguchi to provide a display system that can adjust display emission characteristics in addition to illuminant conditions surrounding the display device (ambient light) to a multiple displays system since multiple displays "soft proofing" is well known in the art.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 3-8, and 10-40 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that the Deguchi reference fails to disclose the illuminant condition sensor be integrated with the display housing so as to form part of the display device. Examiner respectfully traverses. Hansen discloses (Figs. 7-10) a display device for a computer system comprises a screen (200) and at least one sensors (Fig. 7, 580a and 580b) being integrated on the upper display housing portion (590a) and lower display housing portion (590b), respectively. See column 14, lines 15-17.

Furthermore, Deguchi discloses (Figs 6 and 8) a display device (3) including:  
a display (monitor 103) that produces a visible representation of an image; and an illuminant condition sensor (ambient light input section 101) that senses illuminant conditions surrounding the display device, the illuminant condition sensor (101) being mounted on the display device so as to form part of the display device. See column 7, lines 52-58.

Deguchi further discloses (Figs. 8 and 15) a color matching module (image processing section 100) coupled to the sensor (101) that automatically adjusts color data received from on a source device (Fig. 15, monitor 103-1) for use by the display device (monitor 103-2) based on a source device profile (Fig. 15, profile C in memory 104a-1), a destination device profile (a display profile E, 104a-2) associated with the display device (monitor 103-2), and the sensed illuminant conditions. See column 4, lines 55-58; and column

15, line 13 to column 16, line 5.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUU MATTHEW whose telephone number is (703) 305-4850. The examiner can normally be reached on Flexible Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BELLA MATTHEW can be reached on (703) 308-6829. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Luu

A handwritten signature in black ink, appearing to read 'Matthew Luu', with a large, stylized initial 'M'.

**MATTHEW LUU**  
**PRIMARY EXAMINER**